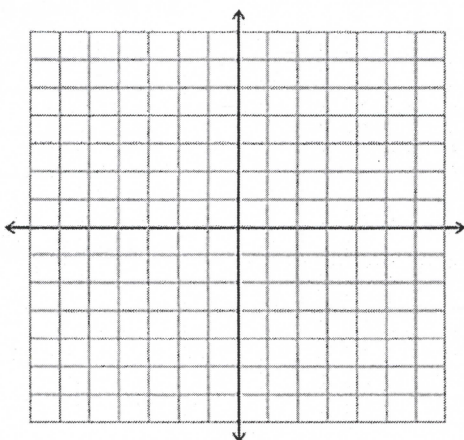


Practice Graphing Using a Table:

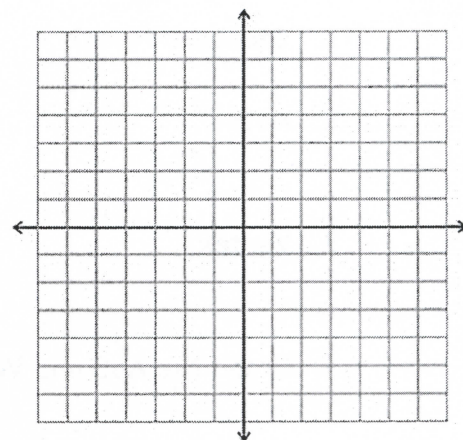
$y = x^2 - 3$

X	Y



$y = -2x^2 + 4x + 1$

X	Y



On the graphs above, draw in the Axis of Symmetry (AoS) and the Vertex.
Is the Vertex a Maximum or a Minimum?

Let's learn a new method for graphing, and shorten our X-Y tables a bit!

Standard Form of Quadratic Functions: $Ax^2 + Bx + C$

Finding the Axis of Symmetry (AoS): $x = \frac{-B}{2A}$

(this will be a _____ dotted line)

Finding the Vertex:

(x, y)

Vertex is a MAX if _____

Vertex is a MIN if _____

PRACTICE:	$y = x^2 - 3$	$y = -2x^2 + 4x + 1$	$y = 5 - 12x + 3x^2$
Std. Form:			
AoS:			
Vertex:			

Graphing using Axis of Symmetry (AoS) and Vertex:

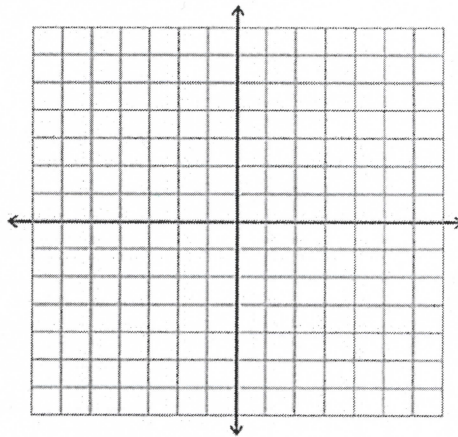
$$y = x^2 + 4x + 4$$

1. Standard Form?

2. AoS:

3. Vertex:

4. Graph the AoS and Vertex!



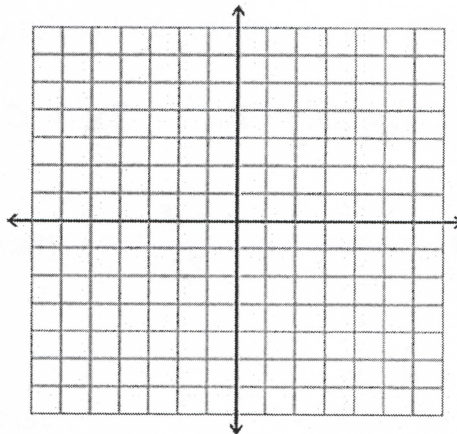
5. Choose 2 x-values on one side of AoS:

X	Y

6. Use Symmetry!!!

What allowed us to shorten our X-Y table? _____

$$y = -3x^2 + 3x - 1$$



X	Y

$$y = 16 + 2x^2 + 12x$$

